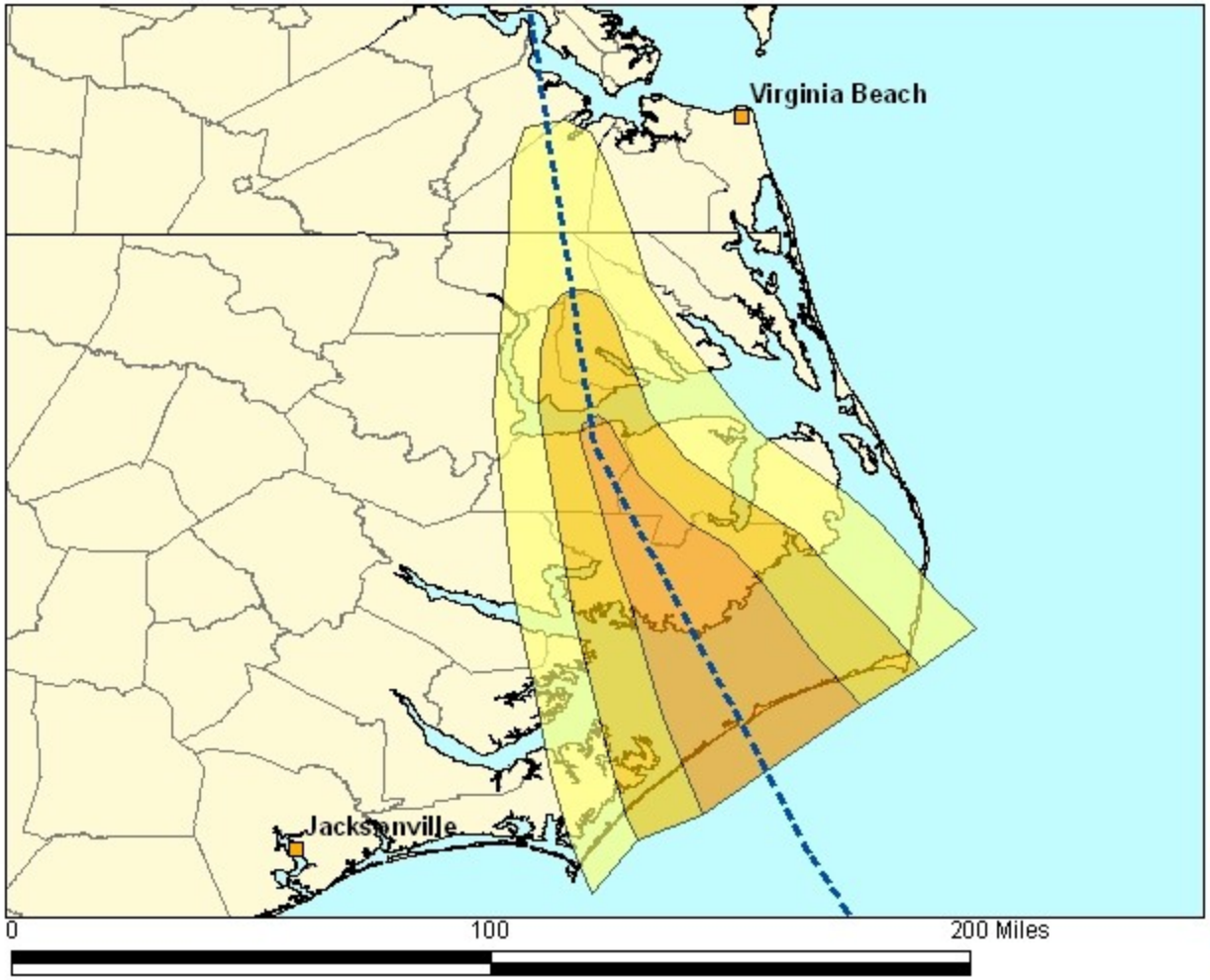
US Army Corps of Engineers

Hurricane Kate Projected Damage Areas

Landfall Expected In About 72 Hours

For Official Use Only!



Post Landfall Projected Damage Areas

This model is based on a Category 2 storm making landfall near Cape Hatteras, NC.

Forecast Track

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a Category 2 storm making landfall near Cape Hatteras, NC. These projections are based on information from the NHC (1330 EDT 04/30/2007) forecast.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

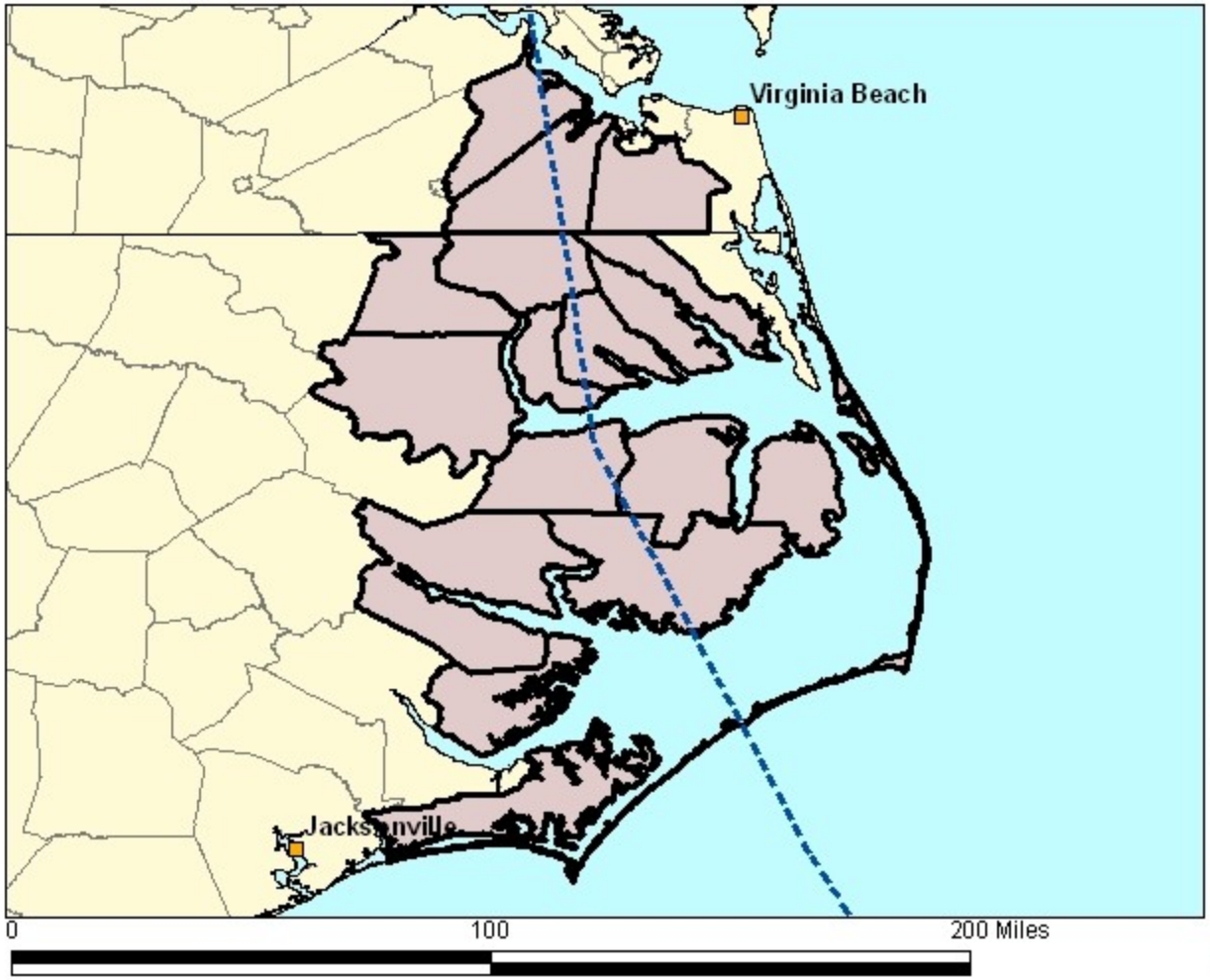
Hurricane Kate Projected Damage Areas	
Generated By: Siemsen, LRL 1400 EDT 04/30/2007	
Sources: HURREVAC LRL-DEBRIS	Page 1 of 13

US Army Corps of Engineers

Hurricane Kate Debris Model

Landfall Expected In About 72 Hours

For Official Use Only!



Post Landfall Debris Model Results

North Carolina - 313,000 Yards
Virginia - 76,000 Yards

Model results per county on following page

This model is based on a Category 2 storm making landfall near Cape Hatteras, NC.

Forecast Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 2 storm making landfall near Cape Hatteras, NC. These projections are based on information from the NHC (1330 EDT 04/30/2007) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds.

Details about this model may be obtained at https://englink.usace.army.mil
or contact ENGLink at 1-877-936-4546

Hurricane Kate Debris Model	
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Sources: HURREVAC LRL-DEBRIS	Page 2 of 13

US Army Corps of Engineers

Hurricane Kate Debris Model

Landfall Expected In About 72 Hours

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State	Yards per State	County	Yards per County
North Carolina		Beaufort	12,000
		Bertie	4,000
		Camden	4,000
		Carteret	15,000
		Chowan	35,000
		Dare	8,000
		Gates	11,000
		Hertford	< 1,000
		Hyde	80,000
		Pamlico	6,000
		Pasquotank	20,000
		Perquimans	38,000
		Tyrrell	30,000
		Washington	50,000
North Carolina	313,000		
Virginia		Chesapeake	6,000
		Isle Of Wight	2,000
		Suffolk City	68,000
Virginia	76,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds.

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or contact ENGLink at 1-877-936-4546

Hurricane Kate Debris Model

Generated By:
Siemsen, LRL 1400 EDT 04/30/2007

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Kate Population Model

Landfall Expected In About 72 Hours

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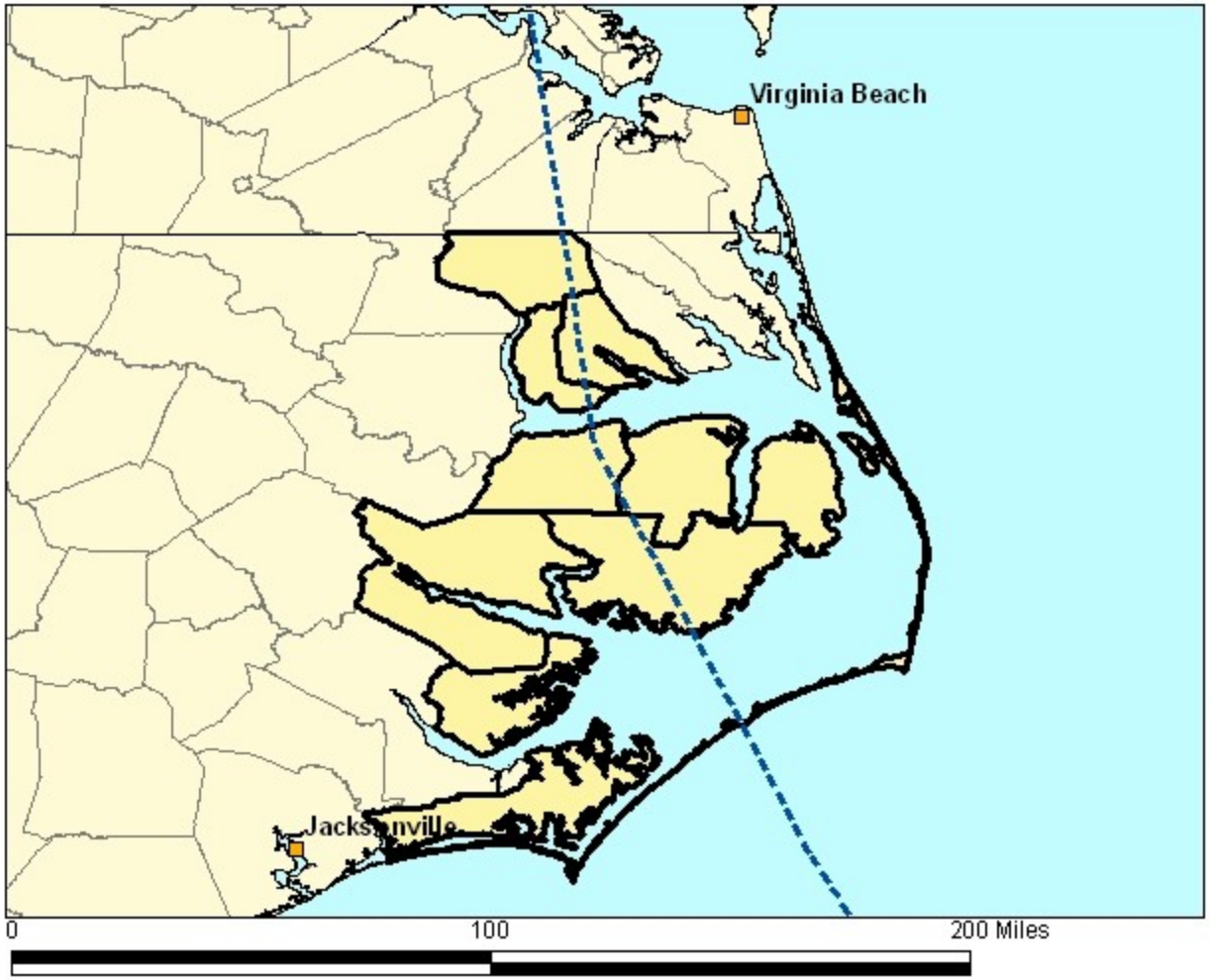

Post Landfall Population Model Results

North Carolina - 38,000

Model results per county on following page

This model is based on a Category 2 storm making landfall near Cape Hatteras, NC.

Forecast Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 2 storm making landfall near Cape Hatteras, NC. These projections are based on information from the NHC (1330 EDT 04/30/2007) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2005 values).

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

Hurricane Kate Population Model	
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Sources: HURREVAC LRL-DEBRIS	Page 4 of 13

US Army Corps of Engineers

Hurricane Kate Population Model

Landfall Expected In About 72 Hours

For Official Use Only!

State	Population per State	County	Population per County
North Carolina		Beaufort	< 1,000
		Carteret	2,000
		Chowan	11,000
		Dare	< 1,000
		Gates	< 1,000
		Hyde	6,000
		Pamlico	< 1,000
		Perquimans	10,000
		Tyrrell	3,000
		Washington	6,000
North Carolina	38,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2005 values.

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

Hurricane Kate Population Model

Generated By:
Siemsen, LRL 1400 EDT 04/30/2007

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Kate Households Model

Landfall Expected In About 72 Hours

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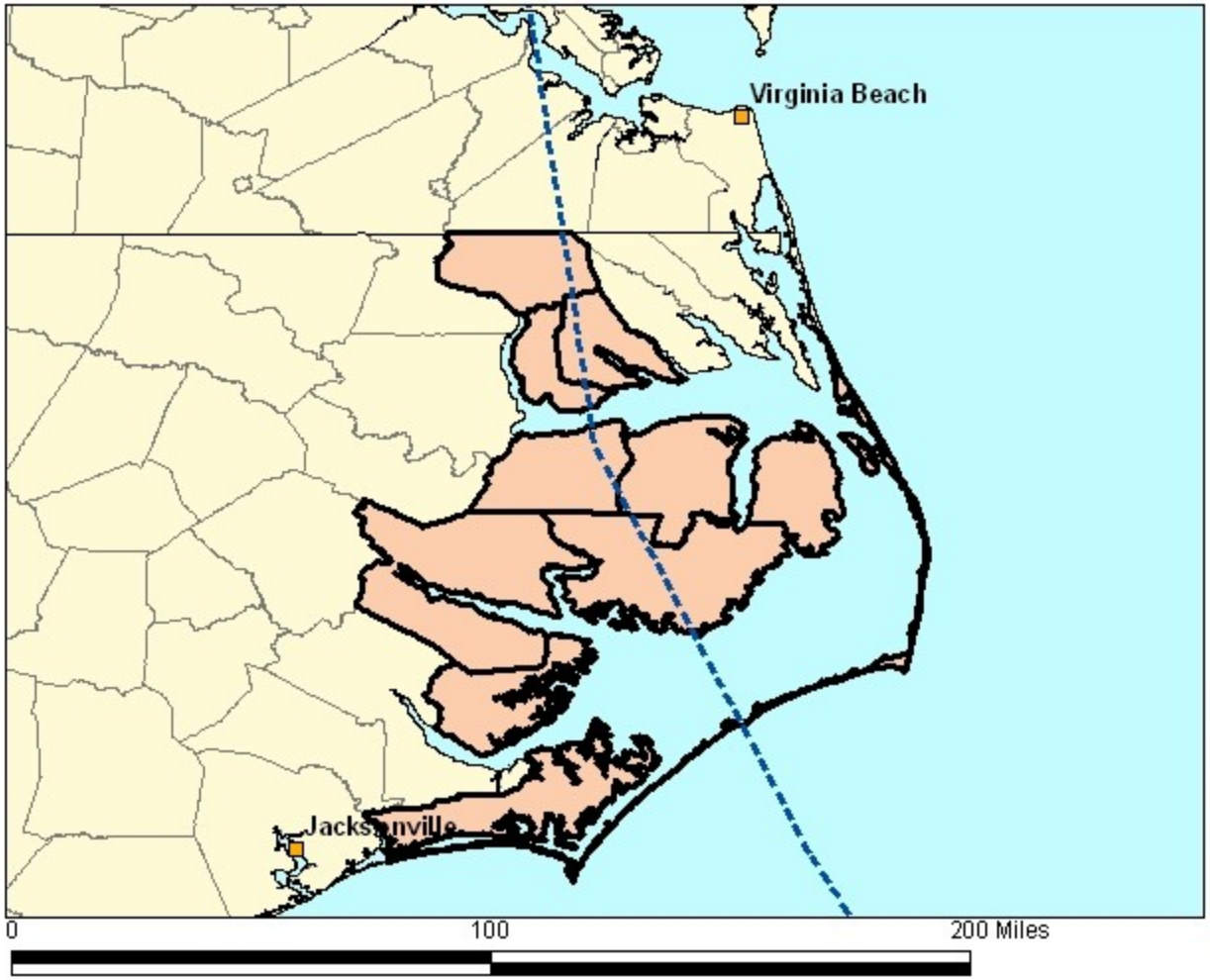

Post Landfall Households Model Results

North Carolina - 15,000

Model results per county on following page

This model is based on a Category 2 storm making landfall near Cape Hatteras, NC.

Forecast Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 2 storm making landfall near Cape Hatteras, NC. These projections are based on information from the NHC (1330 EDT 04/30/2007) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2005 values).

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

Hurricane Kate Households Model	
Generated By: Siemsen, LRL 1400 EDT 04/30/2007	
Sources: HURREVAC LRL-DEBRIS	Page 6 of 13

US Army Corps of Engineers

Hurricane Kate Households Model

Landfall Expected In About 72 Hours

For Official Use Only!

State	Households per State	County	Households per County
North Carolina		Beaufort	< 1,000
		Carteret	< 1,000
		Chowan	4,000
		Dare	< 1,000
		Gates	< 1,000
		Hyde	2,000
		Pamlico	< 1,000
		Perquimans	4,000
		Tyrrell	2,000
		Washington	3,000
North Carolina	15,000		

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2005 values.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

Hurricane Kate Households Model

Generated By:
Siemsen, LRL 1400 EDT 04/30/2007

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Kate Commodities Model

Landfall Expected In About **72** Hours

For Official Use Only!

Post Landfall Ice/Water Model Results

Day One / Day Two / Day Three
NC – 3/5/10 Truckloads

Model results per county on following page

This model is based on a Category 2 storm making landfall near Cape Hatteras, NC.

Forecast Track

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 2 storm making landfall near Cape Hatteras, NC. These projections are based on information from the NHC ***(1330 EDT 04/30/2007)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements (8 pounds of ice per person per day) and SME input. The graphic represents single day needs with full distribution system in place and operating. Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

Hurricane Kate Commodities Model	
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Sources: HURREVAC LRL-DEBRIS	Page 8 of 13

US Army Corps of Engineers

Hurricane Kate Commodities Model

Landfall Expected In About 72 Hours

For Official Use Only!

State	Truckloads per State	County	Truckloads per County
North Carolina		Beaufort	1
		Carteret	1
		Chowan	1
		Dare	1
		Gates	1
		Hyde	1
		Pamlico	1
		Perquimans	1
		Tyrrell	1
		Washington	1
North Carolina	10		

The amount of commodities forecasted is based on Mission Guide Book requirements (8 pounds of ice per person per day) and SME input and the above table indicates suggested needs based on phased deployment of a commodities distribution system. The assumption in this scenario is that 40% of the resident population affected by the hurricane will have power outage in this area and cause a need for ice and water.

Details about this model may be obtained at **https://englink.usace.army.mil**
or contact ENGLink at 1-877-936-4546

Hurricane Kate Commodities Model

Generated By:
Siemsen, LRL 1400 EDT 04/30/2007

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Kate Temporary Housing Model

Landfall Expected In About 72 Hours

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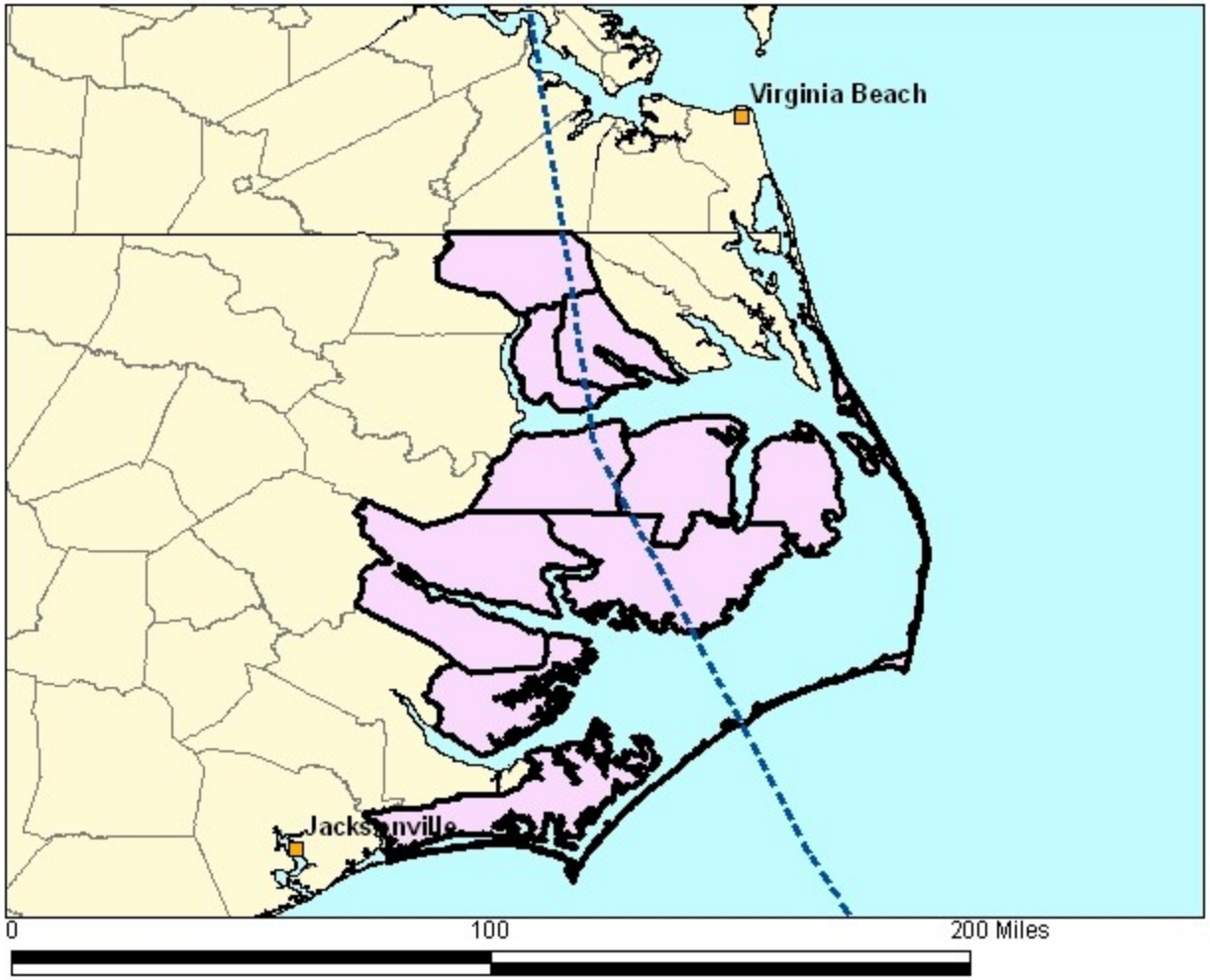

Post Landfall Temporary Housing Model Results

Less than 1,000

Model results per county on following page

This model is based on a Category 2 storm making landfall near Cape Hatteras, NC.

Forecast Track

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 2 storm making landfall near Cape Hatteras, NC. These projections are based on information from the NHC (1330 EDT 04/30/2007) forecast. Temporary housing is based on 1% in CAT 1 and 3% in CAT 2.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

Hurricane Kate Housing Model	
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Sources: HURREVAC LRL-DEBRIS	Page 10 of 13

US Army Corps of Engineers

Hurricane Kate Temporary Housing Model

Landfall Expected In About 72 Hours

For Official Use Only!

State	per State	County	per County
North Carolina		Beaufort	< 100
		Carteret	< 100
		Chowan	< 100
		Dare	< 100
		Gates	< 100
		Hyde	< 100
		Pamlico	< 100
		Perquimans	< 100
		Tyrrell	< 100
		Washington	< 100
North Carolina			

THIS IS AN EXPERIMENTAL MODEL!!

Temporary housing is based on 1% in CAT 1 and 3% in CAT 2.

Details about this model may be obtained at https://englink.usace.army.mil
or contact ENGLink at 1-877-936-4546

Hurricane Kate Housing Model

Generated By:
Siemsen, LRL 1400 EDT 04/30/2007

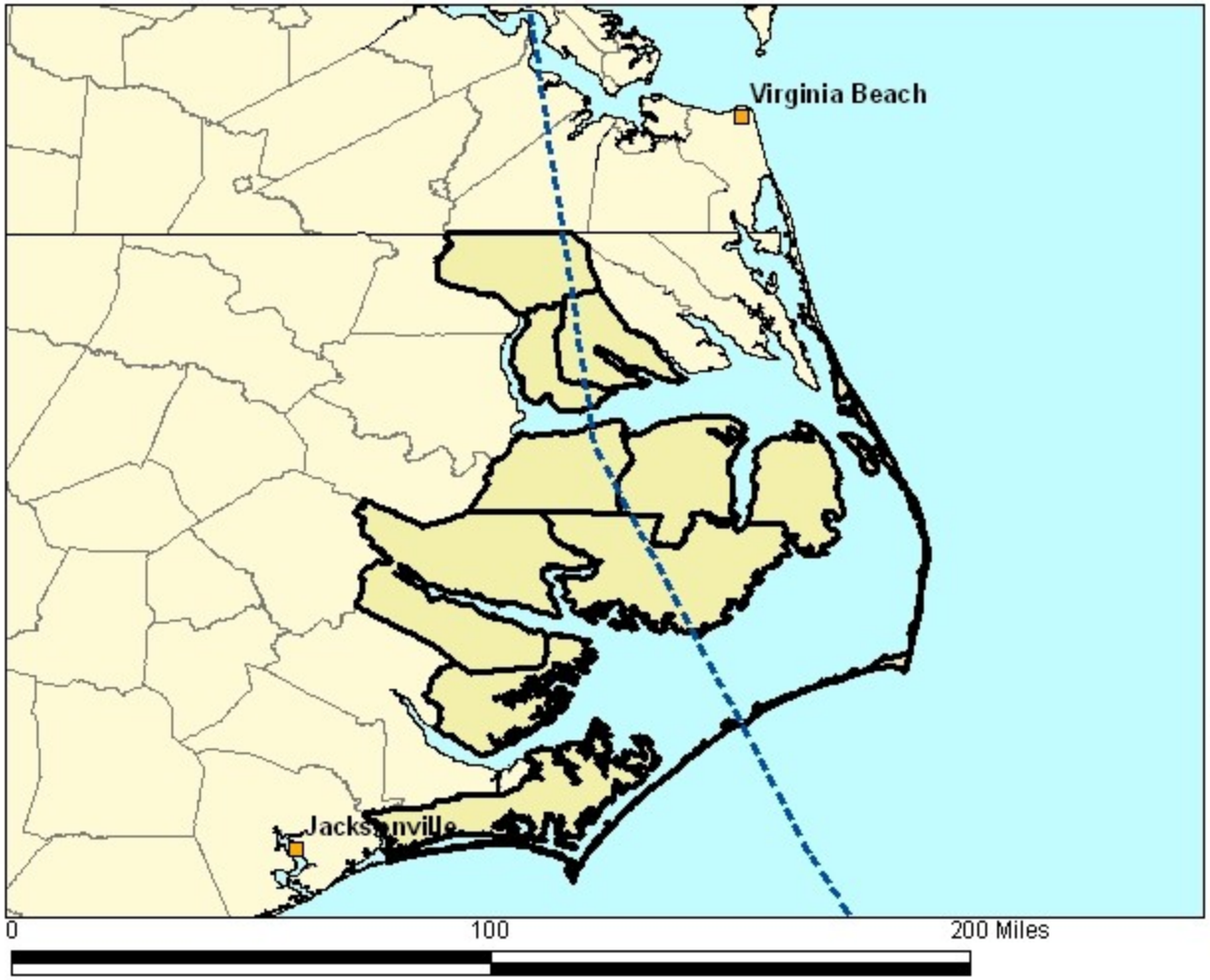
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Kate Temporary Roofing Model

Landfall Expected In About 72 Hours

For Official Use Only!



Post Landfall Temporary Roofing Model Results

Less than 1,000

Model results per county on following page

This model is based on a Category 2 storm making landfall near Cape Hatteras, NC.

Forecast Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 2 storm making landfall near Cape Hatteras, NC. These projections are based on information from the NHC (1330 EDT 04/30/2007) forecast. Temporary roofing is based on 2% in CAT 1 and 6% in CAT 2.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

Hurricane Kate Roofing Model	
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Sources: HURREVAC LRL-DEBRIS	Page 12 of 13

US Army Corps of Engineers

Hurricane Kate Temporary Roofing Model

Landfall Expected In About 72 Hours

For Official Use Only!

State	House Units per State	County	House Units per County
North Carolina		Beaufort	< 100
		Carteret	< 100
		Chowan	< 100
		Dare	< 100
		Gates	< 100
		Hyde	< 100
		Pamlico	< 100
		Perquimans	< 100
		Tyrrell	< 100
		Washington	< 100
North Carolina			

THIS IS AN EXPERIMENTAL MODEL!!

Temporary roofing is based on 2% in CAT 1 and 6% in CAT 2.

Details about this model may be obtained at https://englink.usace.army.mil
or contact ENGLink at 1-877-936-4546

Hurricane Kate Roofing Model

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Siemsen, LRL 1400 EDT 04/30/2007

Sources:
HURREVAC
LRL-DEBRIS